ID	% Complete	WBS	Task Name	Task Priority (0-1000)	Start	Finish	Duration
1	3%	1.1	**dCache-based Analysis Disk Pool**	500	Tue 11/1/05	Tue 9/5/06	213.88 days
	Notes		Design, Creation and Commissioning of Collaboration wide Analysis Disk Pool				
2	100%	1.1.1	**dCache-based Analysis Disk Pool Proposal**	500	Wed 11/30/05	Tue 12/20/05	14.88 days
11	4%	1.1.2	**Phase I prototype system**	750	Tue 11/1/05	Fri 3/31/06	101.63 days
	Notes		This summary task covers the initial phase of the CDF dCache-based Analysis Disk pool. The dCache- based Analysis Disk pool will be used as physics groups project disk and initially ntuple delivery to the rest of the collaboration				
12	100%	1.1.2.1	**Develop support agreements for Phase 2 Preproduction system**	750	Tue 12/6/05	Fri 12/9/05	2.69 days
17	0%	1.1.2.4	**Phase I system Characterization**	750	Tue 11/1/05	Thu 3/9/06	85.63 days
	Notes		This summary task describes the Analysis Disk Pool characterization during the Phase 1 prototype period				
18	0%	1.1.2.4.1	**Determine performance characteristics**	750	Mon 1/23/06	Thu 3/9/06	33.63 days
20	0%	1.1.2.4.1.2	**Develop test programs/scripts**	750	Mon 2/6/06	Mon 2/20/06	11 days

ID	Predecessor Name	Type	Lag
19	Define test specifications, quantities to monitor, pass/fail criteria	FS	0 days

ID	Successor Name	Type	Lag
23	Run tests on Phase 1 pool	FS	0 days

28	0%	1.1.2.4.3	**Develop Comprehensive automated monitoring**	750	Mon 2/6/06	Fri 3/3/06	20 days				
29	0%	1.1.2.4.3.1	**Define monitoring specification**	750	Mon 2/6/06	Thu 2/9/06	4 days				

ID	Predecessor Name	Type	Lag
19	Define test specifications, quantities to monitor, pass/fail criteria	FS	0 days

32	0%	1.1.2.4.3.3	**Develop monitoring programs/scripts**	750	Fri 2/10/06	Fri 3/3/06	16 days				
35	0%	1.1.2.5	**Characterization of supported use cases**	750	Mon 1/30/06	Wed 3/8/06	28 days				
37	0%	1.1.2.5.2	**Develop initial usage guidelines**	750	Mon 2/13/06	Wed 2/15/06	3 days				

ID	Predecessor Name	Type	Lag
36	Recruit Power users	FS	0 days

40	0%	1.1.2.5.4	**Monitor/analyze system load from power users**	750	Mon 2/20/06	Wed 3/8/06	13 days				
46	4%	1.1.2.8	**Configure Hardware for Phase 1**	750	Tue 11/1/05	Wed 2/22/06	74.63 days				
49	100%	1.1.2.8.3	**determine about of memory configure in existing machines**	750	Fri 11/18/05	Mon 12/19/05	19.25 days				

ID	Resource Name	Units	Work	Delay	Start	Finish	Ovt. Work	Baseline Work	Act. Work	Rem. Work
2	Krzysztof Genser	80%	123.2 hrs	0 days	Fri 11/18/05	Mon 12/19/05	0 hrs	0 hrs	123.2 hrs	0 hrs

ID	Predecessor Name	Type	Lag
48	Determine configuration of Door node	FS	0 days

56	100%	1.1.2.9	**add additional file servers to increase disk space**	750	Mon 11/28/05	Fri 12/16/05	15 days				
61	0%	1.1.7	**Phase II Preproduction system**	500	Tue 3/21/06	Tue 9/5/06	120.25 days				
	Notes		This summary task covers the preproductionl phase of the CDF dCache-based Analysis Disk pool. The dCache- based Analysis Disk pool will be used as physics groups project disk								
62	0%	1.1.7.1	**Develop support agreements for Production system**	500	Tue 3/21/06	Tue 5/16/06	40 days				
65	0%	1.1.7.2	**Phase II system transition to production operational mode**	500	Fri 3/31/06	Thu 8/31/06	109 days				
	Notes		This summary task describes the Analysis Disk Pool transition from prototype system to Production system								
66	0%	1.1.7.2.1	**Expantion of user base**	500	Fri 3/31/06	Thu 8/31/06	109 days				
	Notes		This group of tasks refers to incremental growth of user's to the system. The number of users will grow as system capacity grows. As the number of users grow the user load will be verified. The user agreement will specify that the system is not yet in production ; interuptions due to system instabilities or tests may occur on a								

ID	% Complete	WBS	Task Name	Task Priority (0-1000)	Start	Finish	Duration
" Expantion of user base" continued							
			Notes regular basis.				
68	**0%**	**1.1.7.2.1.2**	**Increase users pool to 25% possible users**	**500**	**Fri 4/7/06**	**Thu 5/4/06**	**19 days**
73	**0%**	**1.1.7.2.1.3**	**Increase users pool up to 50% possible users**	**500**	**Thu 5/4/06**	**Wed 5/31/06**	**19 days**
78	**0%**	**1.1.7.2.1.4**	**Increase user pool up to all possible users**	**500**	**Fri 7/21/06**	**Thu 8/31/06**	**29 days**
83	**0%**	**1.1.7.2.2**	**Transition to production hardware and full production capacity**	**500**	**Fri 4/7/06**	**Mon 7/31/06**	**81.25 days**

ID	*Predecessor Name*	*Type*	*Lag*
67	*Use authentication mechanism to limit access*	*FS*	*0 days*

84	**0%**	**1.1.7.2.2.1**	**Aquistion of Head node server**	**500**	**Fri 4/7/06**	**Tue 7/18/06**	**72 days**

ID	*Resource Name*	*Units*	*Work*	*Delay*	*Start*	*Finish*	*Ovt. Work*	*Baseline Work*	*Act. Work*	*Rem. Work*
1	*Doug Benjamin*	*50%*	*288 hrs*	*0 days*	*Fri 4/7/06*	*Tue 7/18/06*	*0 hrs*	*0 hrs*	*0 hrs*	*288 hrs*
16	*REX system administrators*	*100%*	*576 hrs*	*0 days*	*Fri 4/7/06*	*Tue 7/18/06*	*0 hrs*	*0 hrs*	*0 hrs*	*576 hrs*

Notes
This set of tasks refers to the acquistion and installation of server class head node for the dCache system. This node will need to be a 24/7 supported piece of hardware

89	**0%**	**1.1.7.2.2.3**	**Aquistion of PNFS database server**	**500**	**Mon 4/10/06**	**Wed 7/19/06**	**72 days**

ID	*Resource Name*	*Units*	*Work*	*Delay*	*Start*	*Finish*	*Ovt. Work*	*Baseline Work*	*Act. Work*	*Rem. Work*
1	*Doug Benjamin*	*50%*	*288 hrs*	*0 days*	*Mon 4/10/06*	*Wed 7/19/06*	*0 hrs*	*0 hrs*	*0 hrs*	*288 hrs*
16	*REX system administrators*	*100%*	*576 hrs*	*0 days*	*Mon 4/10/06*	*Wed 7/19/06*	*0 hrs*	*0 hrs*	*0 hrs*	*576 hrs*

Notes
This set of tasks refers to the acquistion and installation of server class head node for the dCache system. This node will need to be a 24/7 supported piece of hardware

94	**0%**	**1.1.7.2.2.4**	**Deployment of Door Nodes**	**500**	**Fri 4/7/06**	**Fri 7/21/06**	**75 days**
97	**0%**	**1.1.7.2.2.5**	**add additional file servers to increase disk space**	**500**	**Fri 4/7/06**	**Wed 4/26/06**	**13 days**
101	**0%**	**1.1.7.2.2.6**	**Load testing during system expansion**	**500**	**Fri 4/7/06**	**Mon 7/31/06**	**81.25 days**
105	**0%**	**1.1.7.3**	**Institute Production operational policies**	**500**	**Tue 4/25/06**	**Mon 8/28/06**	**89.08 days**
109	**0%**	**1.1.7.5**	**enhance test Analysis Disk pool dCache system**	**500**	**Wed 4/26/06**	**Tue 5/2/06**	**4 days**
111	**0%**	**1.1.7.5.2**	**Reassign existing fileservers) to scratch dCache Pool**	**500**	**Thu 4/27/06**	**Tue 5/2/06**	**3 days**

ID	*Predecessor Name*	*Type*	*Lag*
110	*determine which older fileservers to use*	*FS*	*0 days*

124	**8%**	**1.2**	**General dCache Pool**	**500**	**Tue 11/1/05**	**Tue 6/20/06**	**159 days**

Notes
This summary task describes the data handling tasks associated with the maintnance, analysis of usage patterns, configuration and testing of new hardware for the production dCache pool

125	**15%**	**1.2.1**	**dCache read Pools**	**500**	**Tue 11/1/05**	**Mon 12/5/05**	**22.38 days**

Notes
This summary task refers to the work associated with the dCache read Pools in the production system.

- It includes determine usages pattern.
- Determine the proper configuration of new ATABeast file servers
- Assign fileservers to the general read pool
- Reconfigure the additional resources as needed

130	**0%**	**1.2.2**	**Configure dCache for collaboration wide ntuples**	**500**	**Tue 5/9/06**	**Mon 5/22/06**	**10 days**

Notes
This summary task describes the work associated with the understanding the ntuple useage for the collaboration wide ntuples (Standard Ntuple, Top Ntuple, B standard ntuple).
This includes determining the amount of dCache disk space (pools and machines).

ID	% Complete	WBS	Task Name	Task Priority (0-1000)	Start	Finish	Duration
134	**0%**	**1.2.3**	**dCache write pools**	**200**	**Mon 5/29/06**	**Tue 6/20/06**	**17 days**
	Notes		With the arrival of the faster LTO-3 drives, we will need large buffers in front of the new drives. Want to investigate - longer term solution to farm output instead of FSS clients writing directly to enstore - test online logging of data				
138	**9%**	**1.3**	**SAM data handling**	**500**	**Tue 11/1/05**	**Wed 10/11/06**	**240 days**
	Notes		Summary task to contain all aspects of SAM datahandling				
139	**20%**	**1.3.1**	**MC File upload in SAM**	**900**	**Mon 11/14/05**	**Fri 4/21/06**	**108 days**
	Notes		This task contains the single file upload into sam (SAM Upload developed by the CDF Italian institutions) and the MC upload system (developed by CDF CD)				
140	**14%**	**1.3.1.1**	**CDF SAM Upload verification**	**500**	**Mon 11/14/05**	**Fri 4/21/06**	**108 days**
	Notes		Summary task describing the verification of the CDF SamUpload client server system				
147	**0%**		**additional SAM Upload fileservers for file upload**	**400**	**Wed 3/15/06**	**Wed 3/29/06**	**10.75 days**
	ID	*Predecessor Name*	*Type*	*Lag*			
	154	*identify fileserver for fcdfdata031 replacement*	*FS*	*0 days*			
	Notes		These are SAM upload fileservers				
153	**37%**	**1.3.1.2**	**Create replacement system for DFC MC upload system (fcdfdata031)**	**900**	**Wed 1/4/06**	**Fri 3/24/06**	**58 days**
	Notes		This summary task describes the design and implementation of the SAM based MC upload server (hardware and software)				
164	**0%**	**1.3.1.2.12**	**additional MC upload fileserver**	**400**	**Mon 3/20/06**	**Fri 3/24/06**	**4.75 days**
	Notes		Summary task describing the redundant system established for MC file upload				
171	**25%**	**1.3.10**	**Collaboration wide Ntuples in SAM**	**750**	**Tue 11/1/05**	**Mon 5/29/06**	**143 days**
	Notes		This summary task refers to the ntuple upload into SAM for the collaboration wide ntuples - Standard Ntuple, Top Ntuple and B standard ntuple				
172	**31%**	**1.3.10.1**	**Collaboration wide Ntuple upload into SAM**	**750**	**Wed 11/9/05**	**Mon 5/8/06**	**122 days**
	Notes		This summary task describes the steps required for ntuple upload into SAM for the collaboration wide ntuples - Standard Ntuple, Top Ntuple and B standard ntuple				
177	**0%**	**1.3.10.2**	**Collaboration wide Ntuple access using SAM metadata**	**500**	**Mon 2/6/06**	**Thu 5/4/06**	**64 days**
	Notes		This summary task refers to the modification of the collaboration wide ntuples (Standard, top and B Standard ntuple) to access ntuple files written into SAM and accessed using the dCache system and SAM metadata only (likely through the snapshot mechanism) The technique of using metadata to define ntuple snapshots and dCache to deliver the files has been used by the Standard Ntuple users for over 1 year at CDF.				
182	**37%**	**1.3.10.3**	**Collaboration wide Ntuple access using Full SAM infrastructure**	**250**	**Thu 11/17/05**	**Mon 5/29/06**	**131 days**
	Notes		This summary tasks describes the use the full SAM delivery mechanism (stations, db servers, projects etc) in CDF ntuple analysees on the Batch systems and interactively				
190	**36%**	**1.3.3**	**SAM dataset download**	**500**	**Tue 11/8/05**	**Fri 12/23/05**	**32 days**
	Notes		Software used to download files from the CDF DH system to the users desktops both on site and offsite				
198	**78%**	**1.3.4**	**SAM-CAF Interface**	**800**	**Tue 11/1/05**	**Thu 2/9/06**	**66 days**
	Notes		Interface enabling robust project recovery				

ID	% Complete	WBS	Task Name	Task Priority (0-1000)	Start	Finish	Duration
209	2%	1.3.5	CDF Production farm SAM migration	800	Thu 11/17/05	Fri 3/17/06	80 days

Notes
CDF production Farm migration from SAM v6 to SAM v7.
Including improvements to the data handling and logging system

213	0%	1.3.5.4	Change the SAM code and deploy on fncdf171	800	Fri 1/13/06	Mon 2/13/06	21.25 days

ID	Predecessor Name	Type	Lag
212	Identify new production code in CDF code browser to change	FS	0 days

222	10%	1.3.6	CDF SAM Autodest server deployment	500	Wed 1/18/06	Mon 2/6/06	14 days

Notes
Design and deploy of the official SAM autodest server for CDF

226	10%	1.3.7	SAM Raw data logging	900	Tue 11/1/05	Mon 8/21/06	203 days
227	28%	1.3.7.1	migrate Raw data logging to SAM only	900	Tue 11/1/05	Tue 1/17/06	49 days
229	0%	1.3.7.1.2	Identify/Modify the DFC schema logging at B0	900	Tue 12/6/05	Tue 1/17/06	26 days

Notes
This summary test describes the investigation of the source of all of the metadata required for CDF RAW datafiles.
Which tables get created in B0 and propegate from B0 and FCC

236	5%	1.3.7.5	Data logging portion of CSL upgrade	900	Tue 11/1/05	Mon 8/21/06	203 days
237	16%	1.3.7.5.5	Prototype phase	900	Tue 11/1/05	Fri 3/17/06	92 days
242	0%	1.3.7.5.6	Production Phase	900	Mon 3/13/06	Mon 7/31/06	101 days

ID	Successor Name	Type	Lag
248	Decommission fcdfsgi1	FS	0 days

251	0%	1.3.11	increase rate of the current RAW Data logging system to accommodate new trigger	1000	Fri 1/20/06	Thu 1/26/06	5 days
254	0%	1.3.8	SAM - SRM	500	Tue 11/1/05	Wed 5/3/06	125 days
257	0%	1.3.9	SAM code maintenance	500	Tue 11/1/05	Wed 10/11/06	240 days
261	5%	1.9	General data handling chores	500	Tue 11/1/05	Tue 11/7/06	259 days
268	11%	1.9.6	Attend required CDF offline/ SAM meetings	500	Tue 11/1/05	Wed 10/11/06	239.31 days

Notes
This task covers the meeting that are attended

SAM operations meeting - Tuesday 9:00-10:30 (1.5 hours)
CDF offline operations meeting - Wednesday 10:00-11:30 (1.5 hours)
SAM design meeting - biweekly Thursdays 14:00 - 15:30 (1.5 hours)
CDF offline SPL meeting - Friday 9:00 - 10:30 (1.5 hours)

weekly average - 5.25 hrs - 12%

269	16%	1.9.6.1	CDF datahandling meeting	500	Wed 11/2/05	Wed 10/11/06	238.13 days
319	16%	1.9.6.2	SAM operations meeting	500	Tue 11/1/05	Tue 10/10/06	238.19 days
370	16%	1.9.6.3	CDF Operations Meeting	500	Wed 11/2/05	Wed 10/11/06	238.19 days
421	0%	1.9.6.5	CDF Offline SPL	500	Fri 11/4/05	Fri 10/6/06	233.19 days
470	0%	1.9.6.6	SAM Grid stakeholders meeting	500	Tue 1/17/06	Tue 9/19/06	175.25 days
480	15%	1.9.6.7	CDF weekly meeting	500	Thu 11/3/05	Thu 10/5/06	233.13 days
528	0%	1.9.6.8	Biweekly meetings w/ CCF - dCache	500	Wed 1/11/06	Wed 10/4/06	190.19 days
549	2%	1.12	Data Handling down times	500	Thu 11/10/05	Thu 9/14/06	214 days
550	16%	1.12.1	General DataHandling down times	500	Thu 11/10/05	Thu 9/14/06	214 days
562	0%	1.12.3	Analysis Disk Pool Downtimes	500	Mon 12/19/05	Tue 6/27/06	131.88 days
564	0%	1.12.3.3	Biweekly Analysis Disk Pool downtimes	500	Tue 1/10/06	Tue 6/27/06	121 days